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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,302	06/21/2001	Atley Padgett Peterson	VF-03272	5599

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EXAMINER	
CHEN, SHIN HON	

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/886,302	PETERSON ET AL.	
	Examiner	Art Unit	
	Shin-Hon Chen	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 September 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by O'Brien et al. U.S. Pat. No. 6658571 (hereinafter O'Brien).

4. As per claim 1, O'Brien discloses a security method for controlling use of an executable application, said method comprising the steps of: procuring a software executable policy enforcement agent which, when invoked, imposes one or more conditions on successful execution, and which, when successfully executed, invokes execution of said executable application (O'Brien: column 2 lines 12-39: software wrapper); encapsulating said executable application with said policy enforcement agent without changing said executable application, to thereby produce a combined program (O'Brien: column 3 lines 38-55); substituting said combined program for said executable application, so that said policy enforcement agent executes instead of said executable application program when said executable application is invoked (O'Brien: column 2 lines 12-39; column 5 line 56 – column 6 line 16); and one of (a)

satisfying said conditions of said control module, whereby said executable application executes, and (b) not satisfying said conditions, whereby said executable application does not execute (O'Brien: column 6 lines 5-16).

5. As per claim 2, O'Brien discloses a method according claim 1. O'Brien further discloses wherein said software executable policy enforcement agent includes a header component, and said substituting step includes the step of amending said header component of said policy enforcement agent portion of said combined program to match the characteristics of said combined program (O'Brien: column 2 lines 12-38: software wrapper is known to change the start-up code section of a software or program).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien and further in view of Kayashima et al. U.S. Pub. No. 20010025346 (hereinafter Kayashima) and further in view of Eggebraaten et al. U.S. Pub. No. 20020120776 (hereinafter Eggebraaten).

8. As per claim 3, O'Brien discloses a method according to claim 1. O'Brien does not explicitly disclose wherein said executable application includes a VPN-tunneling-generating

application, and said step of satisfying said conditions includes the step of running an antivirus program. However, Kayashima discloses running antivirus and firewall and security policy procedures to perform security management (Kayashima: [0003]-[0014]). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to run antivirus program as security measure to determine whether the application is allowed to execute on the computer system. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Kayashima within the system of O'Brien because using anti-virus program to perform security measures is well known in the art. O'Brien as modified does not explicitly disclose the executable application includes a VPN-tunneling-generating application. However, Eggebraaten discloses VPN software that protect data as it flows through VPN tunnel and use of VPN to protect data communicated through Internet (Eggebraaten: [0007] and [0031]). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Eggebraaten within the combination of O'Brien-Kayashima because it protects data while it's being communicated/transferred to avoid tampering.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Kayashima and further in view of Eggebraaten and further in view of Wolff et al. U.S. Pub. No. 20020174358 (hereinafter Wolff).

10. As per claim 4, O'Brien discloses a method according to claim 1. O'Brien does not explicitly disclose wherein said executable application includes a VPN-tunneling-generating

application, and said step of satisfying said conditions includes the step of running a antivirus program having an acceptable update status. However, Kayashima discloses running antivirus and firewall and security policy procedures to perform security management (Kayashima: [0003]-[0014]). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to run antivirus program as security measure to determine whether the application is allowed to execute on the computer system. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Kayashima within the system of O'Brien because using anti-virus program to perform security measures is well known in the art. O'Brien as modified does not explicitly disclose the executable application includes a VPN-tunneling-generating application. However, Eggebraaten discloses VPN software that protect data as it flows through VPN tunnel and use of VPN to protect data communicated through Internet (Eggebraaten: [0007] and [0031]). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Eggebraaten within the combination of O'Brien-Kayashima because it protects data while it's being communicated/transferred to avoid tampering. O'Brien as modified does not explicitly disclose running an antivirus having an acceptable update status. However, Wolff discloses virus event report that shows update status and it allows virus definition data updates to be downloaded by user or as part of a regular scheduled update process (Wolff: [0010] and [0033]). It would have been obvious to one having ordinary skill in the art to using antivirus program that has acceptable update status to determine the security of data. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to

combine the teachings of Wolff within the combination of O'Brien-Kayashima-Eggebraaten because only using up-to-date antivirus program allows precise security measure.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Kayashima.

12. As per claim 5, O'Brien discloses a method according to claim 1. O'Brien does not explicitly disclose wherein said step of satisfying aid conditions includes the step of running a personal firewall program. However, Kayashima discloses running antivirus and firewall and security policy procedures to perform security management (Kayashima: [0003]-[0014]). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to run antivirus program as security measure to determine whether the application is allowed to execute on the computer system. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Kayashima within the system of O'Brien because using anti-virus program to perform security measures is well known in the art.

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Shear et al. U.S. Pat. No. 6292569 (hereinafter Shear).

14. As per claim 6, O'Brien as modified discloses a method according to claim 1. O'Brien as modified does not explicitly disclose wherein said executable application accepts verification

information in a format other than a digital certificate, and said step of satisfying said conditions includes the step of accepting a digital certificate. However, Shear discloses using certificates and digital signatures to protect computer systems from bogus load modules, executables and applications (Shear: abstract and column 5 lines 4-50). It would have been obvious to one having ordinary skill in the art to check the digital certificate of a program before the wrapper program actually invokes the program. It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Shear within the system of O'Brien because digital certificates provide certain trust level to a data so that it can be used to determine whether the data is secure or from s secure source.

15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Shear and further in view of Atkinson et al. U.S. Pat. No. 6367012 (hereinafter Atkinson).

16. As per claim 7, O'Brien as modified discloses a method according to claim 6. O'Brien as modified does not explicitly disclose wherein said step of accepting a digital certificate includes the step of accepting an X.509 based digital certificate. However, Atkinson discloses embedding standard X.509 digital certificate within executable file in order to check whether the executable file comes from a trusted source (Atkinson: column 2 line 35 – column 3 line 62 and column 7 lines 10-19). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Atkinson within the combination of O'Brien-Shear because X.509 digital certificate is a standard format.

17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Shear and further in view of Cooper et al. U.S. Pub. No. 20020029350 (hereinafter Cooper).

18. As per claim 8, O'Brien as modified discloses a method according to claim 6. O'Brien as modified does not explicitly discloses the method comprising the step of translating at least some information from said digital certificate into a form recognizable by said executable application. However, Cooper discloses most of the major browser programs can recognize digital certificates and know where and how to store them (Cooper: [0261]). It would have been obvious to one having ordinary skill in the art to use the wrapper program that wraps browser programs to recognize the digital certificate and use the digital certificates to determine whether software/programs are allowed to execute. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Cooper within the combination of O'Brien-Shear because translating digital certificate so that it can be recognized by different programs is well known in the art.

19. As per claim 9 and 10, claims 9 and 10 disclose the same scope as that of claims 1 and 2. Therefore, claims 9 and 10 are rejected based on the reasons stated in rejecting claim 1.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tajalli et al. U.S. Pat. No. 5361359 discloses limit execution of application programs to the approved applications.

Lambert et al. U.S. Pub. No. 20020099952 discloses policies for secure software execution.

Epstein et al. U.S. Pat. No. 6684329 discloses system and method for increasing the resiliency of firewall systems by using software wrappers.

Epstein et al. U.S. Pat. No. 6584508 discloses advanced data guard having independently wrapped components.

Fraser et al. 'Hardening COTS Software with Generic Software Wrappers'.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (703) 305-8654. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen
Examiner
Art Unit 2131

SC

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